**IT Applications Unit 3, AOS 2, Organisations and Data Management**

**Structure and role of relational databases, p 97**

1. What is a flat file database?

A flat files database stores data in tables consisting of rows and columns.

1. Define each of the following terms:
   1. Primary key

A primary key is a field attached to each record in a database. primary key uniquely identifies each record in a database table.

* 1. Field

A field is the type of data that you may contains in a file.

* 1. Record

A record is a information about on entity.

* 1. Form

A form allows an input screen to be formatted and linked to an underlying table or query.

* 1. Query

When you need to filter a set of data, you use a query. The result of a query is usually turned into usable information by putting it into a report.

* 1. Report

A report formats the query data and allows you to add summary statistics, such as totals, as well as headings, to make the information easier to read and understand.

* 1. Macros

When run, macros will carry out a set of predetermined tasks.

**Data types and formats**

1. List the following **data types** and characteristics of each with examples.
   1. Text, (string) String data types include a series of symbols or values, such as a character string (a sequence of characters) or a binary string ( a sequence of binary values

Alphanumeric, up to 255 characters; it is searchable.

* 1. Numeric

Numbers only.

* 1. Currency

Numbers, but in dollar amounts; formatted with $ symbol and .00 as a default.

* 1. Date/time

A variation of numbers, but formatted to represent a date and/or time.

* 1. Boolean

Represents one of two states – Trues/False.

* 1. Object

Images, audio, video or similar.

* 1. Memo

Like text but unlimited; it is not searchable.

1. **Data Formats:**

Elaborate on the following common data formats:

* 1. Text

Only alphanumeric and it is searchable.

* 1. fixed decimal places

Certain numeric values, such as dollars and cents or places.

* 1. Date

Can be made to display in different ways, e.g. 23/03/11 or 23 – Mar – 11.

* 1. Date/time

A variation of date where you can show time to minutes and seconds if necessary. In 12 – hour clock, hours start at 12;00 and go to 11;59 and a.m. and p.m.are used to indicate the part of the day.

* 1. Dollar, currency

$ symbol is displayed; it defaults to .00 after the value

* 1. True/false, Boolean logic

Can be displayed as words or as check or tick boxes to make data entry easier.